A CASE OF POSTMENOPAUSAL BLEEDING WITH AN UNUSUAL DIAGNOSIS

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CASE REPORT

A 68-year-old lady, menopausal for 26 years, attended the gynaecology clinic with a history of recurrent postmenopausal bleeding for 13 months. She had had two episodes of postmenopausal bleeding 13 months previously when she had an examination under anaesthesia, hysteroscopy and endometrial sampling, which did not show any significant abnormality except atrophic vaginitis. She was advised to use local oestrogen cream for four months to treat atrophic vaginitis. Despite using the cream she continued to have occasional vaginal bleeding. She never had any abnormal cervical smear, never used HRT and did not have any significant family history.

Her medical history included rheumatoid arthritis, hypertension and angina, for which she had been using indomethacin, prednisolone, sulphasalazine, bendrofluzide, enalapril and isosorbide mononitrate. She had gastroscopy and sigmoidoscopy with biopsies three years ago to investigate severe oesophagitis, altered bowel habits, loss of weight and anaemia. It showed *helicobacter*-associated active chronic gastritis and a normal rectal mucosa.

On examination in the gynaecology clinic, a polypoid nodule (2 x 2 cm) was found over the middle third of the posterior vaginal wall. There was another small cystic mass (0.5 x 0.5 cm) on the anterior vaginal wall opposite the nodule on the posterior vaginal wall. The cervix looked normal. Bimanual examination was difficult, and suggested a small, retroverted uterus and some irregularity in the pouch of Douglas. She was booked for an examination under anaesthesia, removal of vaginal masses and hysteroscopy. An urgent pelvic ultrasound scan (USS), full blood count, and measurement of serum urea and electrolytes were also arranged. The transvaginal USS showed a 3.3 x 3.2 x 7.1 cm solid mass of mixed echogenicity in the left iliac fossa. The blood tests were normal.

Under general anaesthesia, the posterior vaginal wall mass was removed and a biopsy was taken from the anterior vaginal wall cyst, which had ruptured during examination, releasing clear fluid. The hysteroscopic view showed an atrophic endometrial cavity from which no curettings were obtained. An urgent biopsy result showed metastatic moderate to poorly differentiated serous adenocarcinoma in the excised mass, probably from the ovary, and abnormal cells, probably malignant, in the cyst sample. An urgent serum Ca125 measurement and a repeat transvaginal USS were arranged (two weeks from the first USS). The serum Ca125 level was markedly raised (1237 IU/ml) and the scan showed a 1.3cm irregular-shaped cyst in the left ovary, but no other pelvic mass was seen.

A provisional diagnosis of primary ovarian cancer was made and an urgent diagnostic laparoscopy was performed, as the second USS did not reveal any pelvic mass of substantial size. This showed a tumour apparently arising from the left ovary. An immediate laparotomy followed, which revealed a malignant left ovarian tumour. There was no spread throughout the abdomen but there was extensive para-aortic lymphadenopathy. The nodes were firmly adherent to the aorta and biopsies were not taken to avoid the risk of hemorrhagic complications. There was no evidence of involvement of the bowel, omentum, stomach, liver or undersurface of the diaphragm. A subtotal hysterectomy, bilateral salpingo-oophorectomy and infracolic omentectomy were performed and an urgent histological examination was arranged.

The histology showed a poorly differentiated solid and papillary carcinoma arising from the fimbrial end of the left fallopian tube. The ipsilateral ovary was distinctly separate from the tumour, and showed foci of adenofibroma. The right ovary and tube, and the endometrium did not show any remarkable features.

The patient was seen in the combined oncology clinic one month after the operation and a plan to treat her with six cycles of cis-platin and paclitaxel was made.

DISCUSSION

Primary fallopian tube carcinoma is one of the rare causes of postmenopausal bleeding. It is extremely rare, accounting for only 0.3% to 0.5% of gynaecological malignancies^(1,2). The tumour is typically a serous adenocarcinoma, papillary pattern being the predominant type. Metastatic spread from the ovary, gastrointestinal tract or breast is not uncommon⁽²⁾.

The inaccessibility of the fallopian tubes poses a problem with early diagnosis. Most of the cases are diagnosed late and often incidentally. Ultrasound scan and serum Ca125 measurements may be useful⁽³⁾, but they fail to differentiate it from ovarian tumour. Therefore fallopian tube cancer is often mistaken for ovarian tumour and is rarely diagnosed preoperatively⁽⁴⁾. Sometimes the diagnosis may not be apparent before histological examination⁽⁵⁾. The present case highlights these issues.

A history of pain, vaginal discharge and pelvic mass is most important for preoperative diagnosis, along with a high index of clinical suspicion⁽⁶⁾. It usually appears between 40 and 65 years of age with a mean age of 56 years^(2,5). About 45% are nulliparous and infertility is reported in up to 71% of these women⁽²⁾. Serum Ca125 is a known marker, which can be used for diagnosis and follow-up⁽³⁾.

The FIGO clinical staging is similar to that for ovarian cancer. About 74% are diagnosed at stage I-IIa⁽²⁾, and positive nodes are found in 33% cases with disease limited to the fallopian tube⁽⁷⁾.

The current treatment is similar to that for ovarian carcinoma, ie platinum-based chemotherapy usually with paclitaxel being the first-line chemotherapy after a debulking surgery⁽⁴⁾. The median survival was 28 months in one series where it was not associated with stage, histology, grade or depth of invasion. Second look laparotomy is an important predictor of survival and may be useful, if positive⁽⁸⁾. Human papillomavirus and smoking have been suggested as risk factors⁽⁹⁾ but there is as yet no convincing evidence. A molecular genetic study suggested a common aetiology for serous carcinoma of fallopian tube, uterus, and ovary because of similar patterns of genetic aberrations in these malignancies⁽¹⁰⁾. In a recent study, it has been suggested that fallopian tube carcinoma may be a part of the hereditary breast-ovarian cancer syndrome associated with BRCA1 germline mutation⁽¹¹⁾.

The present case showed some characteristic features of primary fallopian tube carcinoma eg presentation with postmenopausal bleeding⁽⁶⁾, raised serum Ca125 level⁽³⁾, mistaken for ovarian cancer even at laparotomy⁽⁴⁾ and spread to para-aortic lymph nodes in the absence of spread to pelvic and abdominal organs⁽⁷⁾.

There are certain aspects of the case which are interesting. Firstly, it emphasises the difficulty in diagnosing primary tubal cancer. The investigation and examination findings were normal when she presented for the first time with postmenopausal bleeding. The critic might say that a pelvic USS would have detected the tubal mass at that time. This is not certain as the ultrasound scans done two weeks apart during her recent management reported completely different findings. The subsequent USS failed to detect the mass in the left iliac fossa seen in the previous USS. The tumour was also mistaken as ovarian even during laparotomy.

Secondly, this case also emphasises the importance of urgent histological examination, which suggested that the vaginal nodule was a metastatic carcinoma, probably from the ovary, which enhanced further investigations and surgery leading to the actual diagnosis. The pelvic tumour thought to be ovarian during laparotomy was confirmed by histology as tubal, without any evidence of ovarian cancer.

It could be argued that a laparoscopy should have been performed at the time of excision of the vaginal nodule, which would have led to the diagnosis one week earlier. As

fallopian tube cancer is very difficult to diagnose preoperatively, gynaecologists should have a high index of suspicion in the presence of abnormal vaginal discharge or bleeding, or lesions in the vagina in the women of high-risk age group.

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